

Amendments to Claims

1. (Currently Amended.) A process of making a web or batt comprising polytrimethylene terephthalate staple fibers, comprising (a) providing polytrimethylene terephthalate, (b) melt spinning the melted polytrimethylene terephthalate at a temperature of 245-285°C into filaments, (c) quenching the filaments, (d) drawing the quenched filaments, (e) crimping the drawn filaments using a mechanical crimper at a crimp level of 8-30 crimps per inch (~~3-12 crimps/cm~~), (f) relaxing the crimped filaments at a temperature of 50-130°C, (g) cutting the relaxed filaments into staple fibers having a length of about 0.2-6 inches (~~about 0.5- about 15 cm~~), (h) garnetting or carding the staple fibers to form a web and (i) optionally cross-lapping the web to form a batt.

2. (Original.) The process of claim 1 wherein the staple fibers have a denier of 3 to 15.

3. (Currently Amended.) The process of claim 2 wherein the staple fibers have a length of about 0.5 - about 3 inches (~~about 1.3- about 7.6 cm~~).

4. (Original.) The process of claim 1 wherein the staple fibers have a crimp take-up of 30% or more.

5. (Original.) The process of claim 3 wherein the staple fibers have a crimp take-up of 30% or more.

6. (Original.) The process of claim 1 wherein the relaxation is at 105°C or less.

7. (Original.) The process of claim 1 further comprising bonding the web.

8. (Currently amended.) The process of claim 7 wherein the bonding is selected from the group consisting of spray bonding, thermal bonding and ultrasonic bonding.

9. (Original.) The process of claim 8 wherein a low bonding temperature staple fiber is mixed with the staple fibers to enhance bonding.

10. (Original.) The process of claim 1 wherein fibers selected from the group consisting of cotton, polyethylene terephthalate, nylon, acrylate and polybutylene terephthalate fibers are mixed with the staple fibers.

11. (Original.) The process of claim 1 wherein the relaxation is carried out by heating the crimped filaments in an unconstrained condition.

12. (Original.) The process of claim 2 wherein the staple fibers are 3 - 9 denier per filament.

13. (Previously amended.) The process of claim 1 which is carried out without an anneal step after drawing and before crimping and relaxing.

14. (Currently Amended.) A process of making a fiberfill product comprising polytrimethylene terephthalate staple fibers, comprising (a) providing polytrimethylene terephthalate, (b) melt spinning the melted polytrimethylene terephthalate at a temperature of 245-285°C into filaments, (c) quenching the filaments, (d) drawing the quenched filaments, (e) crimping the drawn filaments using a mechanical crimper at a crimp level of 8-30 crimps per inch (~~3—12 crimps/cm~~), (f) relaxing the crimped filaments at a temperature of 50-130°C, (g) cutting the relaxed filaments into staple fibers having a length of about 0.2-6 inches (~~about 0.5—about 15 cm~~), (h) garnetting or carding the staple fibers to form a web, (i) optionally cross-lapping the web to form a batt, and (j) filling the web or batt into a fiberfill product.

15. (Currently Amended.) The process of claim 14 wherein the staple fibers have a denier of 3 to 15 and a length of about 0.5 - about 3 inches (~~about 1.3—about 7.6 cm~~).

16. (Original.) The process of claim 14 wherein the cross-lapping is carried out.

17. (Original.) The process of claim 16 further comprising bonding the web.

18. (Original.) The process of claim 14 wherein the relaxation is at 105°C or less.

19. (Original.) The process of claim 14 wherein fibers selected from the group consisting of cotton, polyethylene terephthalate, nylon, acrylate and polybutylene terephthalate fibers are mixed with the staple fibers.

20. (Cancelled.)

21. (Cancelled.)

22. (Previously added.) The process of claim 1 wherein the relaxation is at less than 100°C.

23. (Previously added.) The process of claim 1 wherein the relaxation is at less than 80°C.

24. (Previously added.) The process of claim 22 wherein the relaxation is at 60°C or above and the relaxation comprises passing the filaments through an oven at a rate of 50-200 yards/minute for 6-20 minutes.

25. (Previously added.) The process of claim 22 which is carried out without an anneal step after drawing and before crimping and relaxing.

26. (Previously added.) The process of claim 1 wherein the drawing is carried out using two-stage drawing.

27. (Previously added.) The process of claim 26 wherein the two stage drawing comprises (a) a first stage drawing at room temperature and (b) the remaining drawing with the fiber immersed in atmospheric steam set to 90-100°C.

28. (Previously added.) The process of claim 27 wherein 80-90% of the total draw is done in the first stage and 10-20% of the drawing is done in the remaining drawing.

29. (Previously added.) The process of claim 27 wherein the two stage drawing comprises (a) a first stage drawing at room temperature and (b) the remaining drawing with the fiber immersed in a heated water spray.

30. (Previously added.) The process of claim 27 wherein the two stage drawing comprises (a) a first stage drawing at room temperature and (b) the remaining drawing with the fiber immersed in a heated water spray.

31. (Previously added.) The process of claim 1 wherein the drawing is carried out using single-stage drawing.

32. (Previously added.) The process of claim 31 wherein tension and a water spray are applied to the drawn filament after drawing.

33. (Previously added.) The process of claim 26 wherein the drawing is carried out using a draw ratio of about 1.25 - about 4.

34. (Previously added.) The process of claim 30 wherein the drawing is carried out using a draw ratio of about 1.25 - about 4.

35. (Previously added.) The process of claim 30 wherein the relaxation is at less than 100°C.

36. (Previously added.) The process of claim 35 which is carried out without an anneal step after drawing and before crimping and relaxing.

37. (Previously added.) The process of claim 14 wherein the relaxation is at 60°C to less than 100°C and the relaxation comprises passing the filaments through an oven at a rate of 50-200 yards/minute for 6-20 minutes.

38. (Previously added.) The process of claim 14 wherein the relaxation is at less than 80°C.

39. (Previously added.) The process of claim 14 which is carried out without an anneal step after drawing and before crimping and relaxing.

40. (Previously added.) The process of claim 38 which is carried out without an anneal step after drawing and before crimping and relaxing.

41. (Previously added.) The process of claim 40 wherein the drawing is carried out using two-stage drawing comprising (a) a first stage drawing at room temperature and (b) the remaining drawing with the fiber immersed in atmospheric steam set to 90-100°C; wherein 80-90% of the total draw is done in the first stage and 10-20% of the drawing is done in the remaining drawing; wherein the drawing is carried out using a draw ratio of about 1.25 - about 4; wherein the relaxation is at 60°C or above and comprises passing the filaments through an oven at a rate of 50-200 yards/minute for 6-20 minutes.

42. (Previously added.) The process of claim 40 wherein the drawing is carried out using two-stage drawing comprising (a) a first stage drawing at room temperature and (b) the remaining drawing with the fiber immersed in a heated water spray, and wherein the drawing is carried out using a draw ratio of about 1.25 - about 4.

43. (Previously added.) The process of claim 40 wherein the drawing is carried out using single-stage drawing, wherein tension and a water spray are applied to the drawn filament after drawing, and wherein the drawing is carried out using a draw ratio of about 1.25 - about 4.